



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/552,415	04/19/2000	Adam Petrovich	856	3397
23704	7590	12/16/2003	EXAMINER	
SYMBOL TECHNOLOGIES INC LEGAL DEPARTMENT ONE SYMBOL PLAZA HOLTSVILLE, NY 11742			LEE, SEUNG H	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 12/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/552,415	PETROVICH ET AL. Hic	
	Examiner	Art Unit	
	Seung H Lee	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 24 September 2003.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-34, 36-49, 57 and 63-78 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-34, 36-49, 57 and 63-78 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 24 September 2003 has been entered.

Specification

2. Claims 1-19 are objected to because of the following informalities:

Re claim 1, line 3: Please insert a phrase --a terminal removeably connected to said housing by a terminal interface for--. The Examiner will examine the claim 1 with the above limitation.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 10, 13, 14, 16-18, 31, 33, 39, 43, 44, 47, 48, 57, 64, 65, 66, 67, 69, 72, 73, 75, and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertagna et al. (US 5,057,677, of the record)(hereinafter referred to as 'Bertagna') in view of Sherman et al. (US 6,189,788, of the record)(hereinafter referred to as 'Sherman').

Bertagna teaches a system having a merchandise storage cart (36) or a movable housing, a portable transaction-monitoring unit (PTMU) (28) serves as host computer wherein the PTMU removeably connected to the cart by an interface (98) also serves as a cradle interface, connected to data bus (94) for acquiring transaction information such as barcode data from the memory device (90) of the carts, a CPU (88) serves a controller, the PTMU also having a display (62) and a IR link (76) for communicating information over a wireless communication network for up-loading and/or downloading data and the application program to and from a central computing unit (18) of the storage cart, keys on a keypad (64) for providing a data entry and facilitate various transaction function, at least on peripheral device such as a printer (106) attached to the cart and coupled to the PTMU by the data bus for conveying transaction information and related information to or from the user, rollers (86) are attached to the bottom of the cart (36) for facilitating the movement and positioning of the station, storage area or catering truck for storing an article for sale, a scanner (74) for reading bar code wherein the scanner is constructed and arranged with the PTMU, a battery (92) for powering the device, the IR also provides a communication to the cart and printer, the housing (40)

the PTMU receiving information from a magnetic strip card reader (see Figs. 1, 3-6; col. 2, lines 40-col. 3, lines 17; col. 4, line 52- col. 6, line 2; col. 6, line 52-col. 7, line 30; col. 8, lines 38-65; col. 9, line 38-col. 10, line 30; col. 10, line 57- col. 11, line 30).

However, Bertagna fails to particularly teach or fairly suggest that the portable transaction unit is communicating with an external central computer wirelessly.

Sherman teaches a data collection device (10) comprising a removable terminal or a data collection terminal (14) in which the data collection device is communicating with a external data devices such as a host computer via a wireless means whether the data collection device is docked or undocked (see Figs. 1, 8, 10; col. 4, lines 33- col. 6, line 54; col. 10, line 51- col. 11, line 26).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Sherman to the teachings of Bertagna in order to provide a well-known method of centralized inventory system means for storing/recording each and every transaction record in the central computer or the host computer due to the fact that for employing such centralized inventory system, operator(s) can analyze inventories/transactions in any given time without downloading transaction data from every portable devices. Moreover, such modification would provide an improved security means for downloading the each and every transaction record when the transaction is occurred in which prevent the accidental loss of data at the each portable terminal. Furthermore, such modification (i.e., utilizing a magnetic stripe card reader) would provide a convenience means for user(s)/operator(s)

since user(s)/operator(s) can use his/her credit/debit cards, magnetically encoded card, to purchases goods/services therewith, and therefore an obvious expedient.

5. Claims 3-5 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertagna as modified by Sherman as applied to claim 1 above, and in view of Miller et al. (US 5,202,825, of the record)(hereinafter referred to as 'Miller').

The teachings of the Bertagna/Sherman have been discussed above.

Although, Bertagna/Sherman teaches the tendering station, they fail to teach or fairly suggest that the tendering station include a top surface for mounting at least one peripheral device.

However, miller teaches a mobile customer service station (40) having a printer (46) mounted on the top of the station and having a top surface in which can be used as an item handling area, and a cash drawer (43) (see Fig. 1; col. 8, lines 16-30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Miller to the teachings of Bertagna/Sherman in order to provide an user-friendly system means wherein operator(s) can handle merchandises on the top of the mobile carts. Also, such modification would provide a convenient means by having a printer as peripheral device attached on the to of the mobile carts wherein the operator(s) can print out receipts and render receipts to customer(s). Moreover, such modification would provide a security means for storing the valuable notes such as cash into the drawer. Furthermore, such

modification would provide an improved cash management of the mobile station since all the sales revenue can be verified using only cash drawer with each mobile station. Although, Bertagna as modified by Miller fail to particularly teach that the drawer is storing the credit receipt, it would have been an obvious to one of ordinary skill in the art at the time the invention was made to store the credit receipt as well as cash in the cash drawer since the sales amount of credit receipts are also summed to total sales amount, and therefore an obvious expedient.

6. Claims 6 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertagna as modified by Sherman as applied to claims 1 and 31 above, and in view of Swartz et al. (US 5,594,228, of the record)(hereinafter referred to as 'Swartz').

The teachings of the Bertagna/Sherman have been discussed above.

Although, Bertagna/Sherman teaches the tendering station, they fail to teach or fairly suggest that the tendering station include a tag remover for removing tags or labels from an item.

However, Swartz teaches the magnetic decoupler (166) for removing the tags from an item (see col. 17, line 15 - 21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the magnetic decoupler or tags removers as taught by Swartz to the teachings of Bertagna/Sherman in order to provide the secure removals of the alarm tags on the item (i.e., clothes) without damaging the goods. Also,

such modification (i.e., attached a surveillance tag on the item) would reduce the pilfering at the retail shops, and therefore an obvious expedient.

7. Claims 7, 8, 11, 12, 32, 34, 36, 41, 42, 68, 70, and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertagna as modified by Sherman, and further in view of Modiano et al. (US 5,670,768, of the record)(hereinafter referred to as 'Modiano').

The teachings of Bertagna/Sherman have been discussed above.

However, Bertagna/Sherman fails to teach or fairly suggest that the cart includes at least one handle.

Modiano teaches the trolley (60) having a handle for maneuvering the carts, a display (32) attached therewith, a card reader (30), a keypad (36) (see Figs. 1 and 2; col. 3, lines 18-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Modiano to the teachings of Bertagna/Sherman in order to provide an improved and an enhanced means wherein operator(s) can use a card reader for reading the magnetic card (i.e., credit card and/or debit card) at the site of selling. Moreover, such modification would provide an alternative method of reading the credit/debit card number by entering the credit/debit card number using the keypad in case of malfunctioning of the card reader, and therefore an obvious expedient.

8. Claims 9 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertagna as modified by Sherman as applied to claims 1 and 31 above, and further in view of Postrel et al. (US 6,003,008, of the record)(hereinafter referred to as 'Postrel').

The teachings of the Bertagna/Sherman have been discussed above.

Although, Bertagna/Sherman teaches the tendering station having a display and a communication links, however, Bertagna fails to teach or fairly suggest that the display device include an adjustable support attached to the housing and a computer program providing power management of the customer service station.

Postrel teaches that the display (36) includes an adjustable support (39) attached to the housing (25) and the computer program to manage the power supply (see col. 10, line 31 - 51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of the Postrel to the teachings of Bertagna/Sherman in order to provide a user-friendly system means by adjusting an angle of the display wherein the operator(s)/customer(s) can view clear and/or sharp image/text on the display device. Furthermore, such modification (i.e., the tendering station programmed to manage the power supply) would provide efficient means for managing of the power source of the terminal (i.e., notification of the power drain), and therefore an obvious expedient.

9. Claims 15 and 37, 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertagna as modified by Sherman as applied to claims 1 and 31 above, and further in view of Ju et al. (US 5,811,774, of the record)(hereinafter referred to as 'Ju').

The teachings of the Bertagna/Sherman have been discussed above.

Although, Bertagna/Sherman teaches the tendering station having a transceiver for a wireless communication, they fail to teach or fairly suggest that the wireless communication system include a telephone headset.

However, Ju teaches the telephone headset (115) for the wireless communication system (see col. 12, line 58 - 67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the telephone headset as taught by Ju to the teachings of Bertagna/Sherman in order to provide an oral communication between personnel at the central terminal and personnel at the portable station. Moreover, such modification would provide the better customer service by eliminating the necessary time to visit the central terminal to verify the information that the customer requested, and therefore an obvious expedient.

10. Claims 19, 49, and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertagna as modified by Sherman as applied to claims 1, 31, and 64 above, and further in view Talati et al. (US 5,903,878, of the record)(hereinafter referred to as 'Talati').

The teachings of the Bertagna/Sherman have been discussed above.

Although, Bertagna/Sherman teaches the tendering station having a display, they fail to teach or fairly suggest that the station include an Internet browser.

However, Talati teaches the transaction system capable of displaying the Internet browser (see col. 12, lines 20 - 46).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Internet browser as taught by Talati to the teachings of the Bertagna/Sherman in order to provide easier retrieving of the pricing and/or inventory information from the central database. Also, such modification would provide the easy access of the inventory information of the remote located retail shops for checking sold-out items or special order, and therefore an obvious expedient.

11. Claims 20, 21, 23, 24, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertagna as modified by Sherman, and further in view of Modiano.

The teachings of Bertagna/Sherman have been discussed above.

The teachings of Modiano have been discussed above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the notoriously old and well-known monitor of the mobile carts as taught by Modiano to the teachings of Bertagna/Sherman in order to provide an user-friendly system means wherein operator(s)/customer(s) can verify the transaction information with monitor attached to the mobile terminal. Although, Bertagna as modified by Modiano teaches the PTMU is capable of wireless communication function, they fail to particularly teach that the wireless communication is occurred using

a wireless radio. However, it would have been an obvious engineering variation well within the ordinary skill in the art failing to provide any unexpected results for choosing the wireless radio for communication system therein, and therefore an obvious expedient.

12. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bertagna as modified by Sherman and Modiano as applied to claim 20 above, and further in view of Ju.

The teachings of the Bertagna/Sherman/Modiano have been discussed above.

The teachings of the Ju have been discussed above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the telephone headset as taught by Ju to the teachings of Bertagna/Sherman/Modiano in order to provide an oral communication between personnel at the central terminal and personnel at the portable station. Moreover, such modification would provide the better customer service by eliminating the necessary time to visit the central terminal to verify the information that the customer requested, and therefore an obvious expedient.

13. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bertagna as modified by Sherman and Modiano as applied to claim 20 above, and further in view of Miller and Swartz.

The teachings of the Bertagna/Sherman/Modiano have been discussed above.

The teachings of the Miller have been discussed above.

The teachings of the Swartz have been discussed above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Miller and Swartz to the teachings of Bertagna/Sherman/Modiano in order to provide the secure removals of the alarm tags on the item (i.e., clothes) without damaging the goods. Also, such modification (i.e., attached a surveillance tag on the item) would reduce the pilfering at the retail shops. Furthermore, such modification would provide a security means for storing the valuable notes such as cash into the drawer. Moreover, such modification would provide an improved cash management of the mobile station since all the sales revenue can be verified using only cash drawer with each mobile station. Although, Bertagna as modified by Sherman and Miller fail to particularly teach that the drawer is storing the credit receipt, it would have been an obvious to one of ordinary skill in the art at the time the invention was made to store the credit receipt as well as cash in the cash drawer since the sales amount of credit receipts are also summed to total sales amount, and therefore an obvious expedient.

14. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bertagna as modified by Sherman and Modiano as applied to claim 20 above, and further in view of Bernard et al. (US 5,918,213)(hereinafter referred to as 'Bernard').

The teachings of the Bertagna/Sherman/Modiano have been discussed above.

Although, Bertagna/Sherman/Modiano teaches the tendering station, Bertagna/Sherman/Modiano fail to teach or fairly suggest that the station include a computer program for assisting to a customer by identifying customer preferences and inventory availability.

However, Bernard teaches the computer program for identifying customers preferences (col. 3, line 63- col. 4, line 7; col. 6, lines 11-29) and inventory availability (col. 24, lines 29-41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the computer program as taught by Bernard to the teachings of the Bertagna/Sherman/Modiano in order to provide better customer service by supplying the special option/discount to the specific customers based on the customer(s) preferences who are eligible for certain benefits (i.e., discounted goods/services, promotions based on customer(s) region). Also, such modification would increase the sales amount by sales person informing customers for special goods on sale or promotion based on customer previous purchasing pattern by retrieving the customer purchasing history from the central database system, and therefore an obvious expedient.

15. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bertagna as modified by Sherman and Modiano as applied to claim 20 above, and further in view of Postrel.

The teachings of the Bertagna/Sherman/Modiano have been discussed above.

The teachings of the Postrel have been discussed above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of the Postrel (i.e., the tendering station programmed to manage the power supply) to the teachings of Bertagna/Sherman/Modiano in order to provide efficient means for managing of the power source of the terminal (i.e., notification of the power drain), and therefore an obvious expedient.

16. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bertagna as modified by Sherman and Modiano as applied to claim 20 above, and further in view Talati.

The teachings of the Bertagna/Sherman/Modiano have been discussed above.

The teachings of the Talati have been discussed above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Internet browser as taught by Talati to the teachings of the Bertagna/Sherman/Modiano in order to provide easier retrieving of the pricing and/or inventory information from the central database. Also, such modification would provide the easy access of the inventory information of the remote located retail shops for checking sold-out items or special order, and therefore an obvious expedient.

17. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bertagna as modified by Sherman as applied to claim 31 above, and further in view of Bernard.

The teachings of the Bertagna/Sherman have been discussed above.

The teachings of the Bernard have been discussed above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the computer program as taught by Bernard to the teachings of the Bertagna/Sherman in order to provide better customer service by supplying the special option/discount to the specific customers based on the customer(s) preferences who are eligible for certain benefits (i.e., discounted goods/services, promotions based on customer(s) region). Also, such modification would increase the sales amount by sales person informing customers for special goods on sale or promotion based on customer previous purchasing pattern by retrieving the customer purchasing history from the central database system, and therefore an obvious expedient.

18. Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bertagna as modified by Sherman, and further in view of Saliga (US 5,397,884, of record).

The teachings of the Bertagna/Sherman have been discussed above.

Although, Bertagna/Sherman teaches the tendering station, they fail to teach or fairly suggest that the tendering station determines an authorization hierarchy.

However, Saliga teaches a key (44) containing an access code in which the access code determines the level of accessing levels (e.g., a maintenance level, a managerial level, etc.) (see Fig. 1; col. 6, lines 17-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the well know hierarchical access control mode as taught by Saliga to the portable system of Bertagna/Sherman in order to provide an improved and an enhanced system means assigning each and every user with particular privileges, that is, a sales personnel can have a privilege of conducting transactions of the items whereas a store manage can have a privileges of generating daily sales report, overriding pending transactions, etc. accordingly.

19. Claim 74 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bertagna as modified by Sherman as applied to claim 64 above, and further in view of Bernard et al. (US 5,918,213)(hereinafter referred to as 'Bernard').

The teachings of the Bertagna/Sherman have been discussed above.

The teachings of the Bernard have been discussed above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the computer program as taught by Bernard to the teachings of the Bertagna/Sherman in order to provide better customer service by supplying the special option/discount to the specific customers based on the customer(s) preferences who are eligible for certain benefits (i.e., discounted

goods/services, promotions based on customer(s) region). Also, such modification would increase the sales amount by sales person informing customers for special goods on sale or promotion based on customer previous purchasing pattern by retrieving the customer purchasing history from the central database system, and therefore an obvious expedient.

Response to Arguments

20. Applicant's arguments filed 24 September 2003 have been fully considered but they are not persuasive.

In response to the applicant's argument that *"....the cited references do not show a tendering or service station in which magnetic stripe card information read by a reader and response to the card information are "transmitted over a wireless communication network" (see page 17, line 27+)*, the Examiner respectfully request to review a Bertagna reference wherein the Bertagna teaches that the PTMU having a magnetic stripe card reader and uploading and/or downloading data using wireless network such as IR communication link with a CCU and /or a microprocessor on the card (36) (col. 8, lines 38+).

In response to applicant argument that *"Saliga, does not show receiving the key/terminal user identification on the key/terminal" (see page 18, line 27+)*, the Saliga simply provide an evidence of using a hierarchical access control method, that is, a low level of password provided by a user(s)(e.g., clerk, etc.) only can load access code into

a key whereas a higher level of password used by a user(s) (e.g., manager(s)) can generate number and times of key issuances, use of common facilities, etc. Therefore, when interpreting the claimed limitations as broadly as is reasonably possible, the combination of the teachings of Saliga and Bertagna as modified by Sherman meets the claimed limitation.

Conclusion

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Seung H. Lee whose telephone number is (703) 308-5894. The examiner can normally be reached on Monday to Friday from 7:30 AM to 4:00 PM.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (703) 305-3503. The fax-phone number for this group is (703) 308-5841 or (703) 308-7722.


Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [seung.lee@uspto.gov].

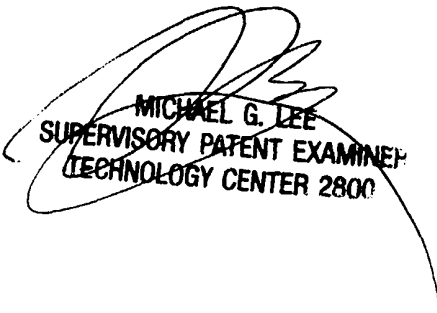
All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Application/Control Number: 09/552,415
Art Unit: 2876

Page 19

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.


Seung H. Lee
Art Unit 2876
December 08, 2003


MICHAEL G. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800